

# On-line Education for Practicing Professionals: A Case Study

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This study explored an instructor's and graduate students' reactions to their first on-line course. They initially felt high levels of stress. With increasing confidence, graduate students expressed their satisfaction. Most appreciated the reflection time that asynchronous dialogue provided, and learning relevant to real life that built on their professional experience. They valued the flexibility and opportunity to engage in professional development while in employment. Frustrations included the added time commitment and their hesitation to impose personal timeframes on other participants. The instructor noted the extra time commitment, and his need for technological support and professional development.

Key words: distance learning, adult learners, professional development, peer interaction

Cette étude porte sur les réactions d'un formateur et d'étudiants diplômés lors de leur premier cours en ligne. Au début, ils ressentaient énormément de stress. À mesure qu'ils prenaient de l'assurance, les étudiants diplômés ont exprimé leur satisfaction. La plupart aimaient le temps de réflexion fourni par le dialogue asynchrone et la pertinence du contenu par rapport à la vie réelle, ce qui leur permettait de mettre à profit leur expérience professionnelle. Ils voyaient d'un bon œil la souplesse de la formule et la possibilité de se perfectionner tout en travaillant. Par contre, ils trouvaient difficile d'avoir à s'engager à fournir du temps supplémentaire et hésitaient à imposer leurs horaires personnels à d'autres participants. Le formateur a noté, pour sa part, l'importance du temps supplémentaire requis et les exigences en matière de soutien technologique et de perfectionnement professionnel.

Mots clés : apprenants adultes, perfectionnement professionnel, enseignement en milieu rural, dialogue asynchrone.

In a world of fast-paced rapid change, the increasing complexity of tasks makes connection and co-operation with others in knowledge creation increasingly important (Cohen & Prusak, 2001). Today's knowledge may be obsolete tomorrow. Because ongoing education for all is an essential key in building knowledge societies, everyone must be a lifelong learner (UNESCO, 2002b). Collaborative on-line learning in both developed and developing countries (UNESCO, 2002a) is rapidly becoming an acknowledged and integral part of mainstream educational systems. Computer mediated communication (CMC) can offer a flexible pathway for professionals who wish to further their education while in employment. My main objective in this study was to explore the perceptions of on-line learning of a selected group of graduate students, all in full-time employment, and of their instructor. My aim was to come to a dialogical understanding of the complex interactions that occurred as the study progressed and the processes and issues that enhanced or detracted from the experience for participants.

#### THEORETICAL FRAMEWORK

This study was based on a constructivist perspective in which learning is viewed as a social and cognitive process. CMC offers the opportunity for learners to interact with the instructor and fellow learners as they apply new knowledge in authentic contexts. Interaction is an integral part of collaborative learning, where, to a large extent, knowledge is socially constructed, created actively, and evaluated communally (Wheatley, 1992). Ideally, CMC is a process of shared creation in which participants create a common meaning in a mutually shared space or environment, for a specific purpose (Allbritton, 1996). CMC involves mostly asynchronous communication among learners and the instructor, using as a minimum, e-mail and a web-based discussion board. Asynchronicity refers to the facility for participants to take part at any time and place convenient to them, and to the intervening time gap between communication and response (Allen, Hartman, & Truman, 1997). Making meaning is a dialogic process; when people communicate, there is a real chance that by pooling their experiences, they may acquire a new level of understanding (Diver, Asoko, Leach, Mortimer, & Scott, 1994; Edwards & Mercer, 1987).

Although the Internet provides the infra-structure for knowledge sharing networks, it paradoxically both separates people and connects them. Although some researchers claim it is possible to achieve high levels of collaboration on-line (Beckingham & Wainio, 1997), others warn peer interaction may be challenging to implement at a distance (Moore, 1989). Schwier (2001) asserted, "We can wheedle, beg, cajole, whine and nag learners to become involved" (p. 28), but ultimately it is the learners who determine the level of peer interaction that occurs. Not all learners have the skills or predisposition necessary to succeed in an on-line learning environment (Department of Education, Science and Training, 2003; Palloff & Pratt, 1999, 2001). Some learners adapt more easily to CMC than others.

Many writers (Anderson & Garrison, 1998; Bonk, Kirkley, Hara, & Dennen, 2001; Palloff & Pratt, 1999, 2001) have identified the vital role of the instructor in the development of an on-line learning community. Yet not all instructors feel comfortable teaching on-line and may feel unsure and uncertain in their role (Beckingham & Wainio, 1997; Palloff & Pratt, 1999, 2001).

Hara and Kling (2000) concluded that educators still have much to discover about the conditions that "create the good, the bad, and the ugly in Internet enabled text-based distance education" (n.p.). Research findings are mixed and indicate that not all on-line experiences are positive for learners or for instructors (Bonk, Kirkley, Hara & Dennen, 2001; Hara & Kling, 2000; Palloff & Pratt, 1999, 2001). According to Cohen and Prusak (2001), the growth of on-line learning opportunities increases the need to understand the social nature of learning, that is, how and why people connect with each other, whether in a classroom or miles apart across the globe.

#### METHODOLOGY

Because case study is an ideal methodology to conduct a holistic, in-depth investigation (Feagin, Orum, & Sjoberg, 1991), it seemed the most appropriate way to approach this inquiry. As advised by Stake (1995), choosing to study a particular case, enables a researcher to bring out a rich description of the lived experience from the participants' viewpoint. Participants in this study were the learners and the instructor. Most

studies on on-line learning are explored from the instructor's or an outsider's perspective, listening to the voices of learners. Not often are voices of instructor and learners heard concurrently. As advised by Kitzinger and Gilligan (1994), my aim in this study was to give participants voice, and to very carefully orchestrate the varying tones, without letting one dominate the other, into a rich description and understanding of this on-line learning experience.

The research followed the qualitative tradition and included the collection of data from multiple electronic sources as well as from final face-to-face semi-structured individual interviews. Discussion board, email transcripts, journals, and interviews provided a rich source of qualitative data. These data sources indicated who was interacting, who was supporting, who was sharing knowledge, and provided a route for interaction, reflection, and interpretation to occur between participants and me, the researcher.

#### THE CASE STUDY

This was a case study of a master's level on-line education course "Curriculum for Rural, Northern and Aboriginal Schools"<sup>1</sup> that utilized WebCT<sup>2</sup> as a course delivery platform. The course was structured to promote interaction and dialogue, as well as examination of thoughts, ideas, and assumptions as participants engaged with technology, content, curriculum questions, assignments, and each other. Individual, as well as group assignments were included, with the opportunity to rework them after instructor comments. Students were graded only on assignments. The course included the following two additional, mandatory, but ungraded components:

1. Students each had the responsibility to pose a relevant question and moderate the ensuing Bulletin Board discussion for one week.
2. All students e-mailed a weekly e-journal entry to the instructor and researcher. Participants were instructed that journal entries should be around 200- 300 words, so they were not viewed as a cumbersome chore. The objective of the e-journals was to encourage reflection by linking the readings and coursework to

professional and personal experiences. The instructor, John, and I committed to responding weekly to the journals with the aim of promoting dialogue, sharing, reflection, and critical thinking. Although student participants had the option to share all or part of their journals with peers on the Bulletin Board, none chose to do so.

All students initially enrolled in the course and their instructor consented to participate in the study.<sup>3</sup> All students, except for one from the city, were located in northern and rural areas of a province in Canada; because of distance, the opportunity to participate in traditional evening classes at university locations was not available. The instructor was located at a southern Canadian university and the researcher in Saskatchewan.

*Student participants.* Eight students enrolled in the course. All student participants had completed an undergraduate degree, and were enrolled in post-graduate studies in education. Although some students had completed several graduate courses, for others, this was their first. None had previously participated in on-line learning. All participants were in full-time employment in some educational capacity, ranging from elementary and high school teachers and administrators, to an Aboriginal centre counsellor. Five of the participants were female and three were male. Ages ranged from late 20s to late 40s. Professional experience varied from four years to over twenty-five years. All participants had family commitments, and three had children less than five years of age. Difficulty accessing the course materials caused two participants (both male) located in remote regions to withdraw during the first week of the course.

*The course instructor.* John, the instructor, was a university professor who had much experience in teaching traditional as well as on-line courses, but who had not previously used the WebCT platform for course delivery. Previous courses he had taught on-line were either email-based or web-based, using graduate student support to set up and maintain the web site.

*The researcher.* My interest in on-line learning stemmed from three courses that were part of my master's degree. Subsequently, I undertook further coursework to become a certified on-line instructor, and completed a doctorate in educational administration with a focus on on-line learning. For this study, John and I designed the course collaboratively. I put the materials up on the WebCT site, with technical support. Initially, I intended to co-teach the course with the John, but was advised that being in a position of perceived power might affect how students related to and interacted with me. Consequently, my role in the course became that of facilitator, in which I provided technical support to participants and interacted with them through email and e-journals, but played no part in grading assignments. Adler and Adler (1994) described three categories of qualitative researchers, peripheral-member, active-member, and complete-member researchers. Because I was a fully fledged member of this on-line group, I considered myself a complete-member researcher. I had several roles within the group -- researcher, technical expert, and support person. This multiple identity perspective resonates with Blackwood's (1995) conclusion: Because study participants perceive a researcher in different ways at different times, researcher identities in the field are "never stable, never simply defined" (p.70). In other words, the participants in the study and I did not step into fixed and fully defined positions. Behaviours and expectations of each other were part of a dynamic process that occurred during this project.

#### *Data Collection*

I collected qualitative data throughout the four-month period of the course, as well as during the planning and development stages when I was working with John, the instructor. Multiple data sources included responses to e-journals, discussion board, instant messaging, and e-mail transcripts, a midway on-line course evaluation, and final individual face-to-face semi-structured interviews, lasting from 60-90 minutes, which were conducted at a venue of each participant's choice. All interviews were taped and transcribed and returned to each individual to check for accuracy before analysis.

Internet communication provided a rare opportunity to observe the social construction of reality as it occurred textually. Conversations could stretch over long periods of time, be restarted and continued with greater ease than in face-to-face settings. Instead of relying on memory, written dialogues could be revisited to reconstruct events. On the other hand, although the asynchronous nature of Internet research provided the opportunity for detailed reflective responses to questions, the spontaneity of face-to-face dialogue in the final interview allowed exploration of issues as they arose in conversation.

I analysed the data with ATLAS.ti. Data analysis was an inductive process, described by Gall, Borg and Gall (1996) as "the process of inferring themes and patterns from an examination of the data" (p. 753). It was not a separate, self-contained phase but rather an ongoing and integral part of data collection. The analysis required careful dialogue between the researcher and participants and much thought and reflection to gain shared understandings and meanings that were respectful and just to the participants, who were open and honest enough to share their thoughts, feelings, and concerns. It also provided a point of re-entry to discuss any concerns or issues that arose and required clarification. Discussion of the findings of this study focuses on the types of interaction among participants and participants' perceptions of the on-line learning experience.

## INTERACTION

Correspondence among participants was separated into two categories: task-related and relational. Task-related interaction referred to communication about any aspect of the course. Relational referred to general non-course related social interaction.

E-mail communication among student participants and with the instructor and researcher was mostly task-related. John and I initiated the majority of social communication, which was practically non-existent among student participants. They prioritised the demands on their time. "With me the personal stuff depends on the time someone wants to put into it. Time is at a premium. I want to focus on what has got to be done" (Rob, course evaluation). Student participants completed all the assigned individual and group tasks, and communicated with each other

only when they had to. Interaction among students was very much task-oriented and occurred mostly when it was mandated, or forced, to use the participants' words.

The bulletin board provided a forum for sharing professional experiences. Although participants were required to moderate one discussion, response to questions posted was voluntary. Participants described the dialogue that occurred as "very respectful, encouraging, supportive, which allowed us to 'go to an even deeper level' at times. Safe." (Ann, e-journal). Although task-related communication is fundamental to an interactive learning experience, with no mental picture of fellow participants, the sharing of personal information and experiences played a vital role in forging connections. The relational communication that occurred among participants was limited to a large extent to sharing of professional experience. At the personal level, self reflection or the telling of personal stories occurred in the process of e-journaling with the instructor and researcher, but were not shared with the group. In a similar vein, Conrad and Kanuka (1999) observed that for graduate on-line learners, mastering the cognitive demands placed on them took priority over establishing social presence.

#### PARTICIPANTS' EXPERIENCE

Learners in this study showed high levels of adaptability, resilience, and dedication in overcoming the challenges of technology and the different approaches to teaching and learning that they encountered. From their e-journals, e-mails, Bulletin Board writings, and final interview comments, I determined that all student participants who completed the course found several aspects of the on-line learning experience meaningful, although some factors detracted from it. On the other hand, the instructor indicated that he neither valued nor enjoyed it.

##### *Positive Factors and Strategies*

Learners cited a variety of reasons why this experience had been of value. These included the relevance of the course content, self reflection time, the opportunity for self expression, a sense of accomplishment, increased technology skills, opportunity to participate, flexibility, safety, and interaction with other participants.



*Course content.* Learners considered the course content, including the texts, the curriculum questions, and the opportunities for self reflection, added to the quality of their learning experience. They valued the relevance of the course content to their professional experiences, and appreciated how it allowed them to use prior learning as a foundation for new knowledge. They described the material and assignments as inviting, engaging, and thought provoking, which allowed them to discover, and put words to who they probably already knew they were at some level, but never took the time to formulate, or give recognition to. "Content and assignments have led naturally from one topic to the next, to the next .... A good natural flow that allowed us to build on what we were learning, experiencing" (Susan, on-line evaluation). Similar to learners in Conrad's (2002) study, the students found that the ability to identify and engage on an emotional level with the content contributed greatly to the learning experience.

*Self reflection.* Some participants reflected deeply in their e-journals and responded to the comments and questions that were made. Fran commented, "I have learned a lot, really enjoyed the dialogue, having my thinking challenged by questioning, and engaging in personal reflection and introspection" (Fran, e-journal). Musings were not lost in the utterance, or distorted as a remnant in an imperfect memory, but became a permanent record, a conversation with self, with John and me, not static, but dynamic, as participants challenged their assumptions and revisited their thinking. Susan described the stimulus of moving out of her comfort zone. "Learning on-line, with the ability to edit, think deeply before posting a comment, has allowed me to push myself and stretch myself out of my comfort zone in a way that I never did in f2f [face-to-face] learning" (Susan, final interview).

Chris recalled feeling "stretched to the limit, ... Here we experienced many of the same frustrations and anguish that our students feel as they too struggle to become the educated people we want them to be" (Chris, e-journal). Viewing their experiences through a learner's lens promoted rethinking of their own roles as teachers and leaders in their professional situations, and a better understanding of how their students felt when put in places outside their comfort zone.

*Self-expression.* For Fran, another advantage of communicating on-line was the ability “to express myself a lot more than in f2f. I am always interested in everyone’s responses and sometimes I don’t put my own in” (Fran, final interview). The perceived anonymity of communicating by Internet promoted risk-taking in people who might be more reticent in a face-to-face situation. A sense of accomplishment, of having overcome challenges, of success, was evident in the words of the participants, not only having conquered technology and new ways of learning, but also having gained courage to give voice to thoughts in a public forum and finding responses empowering.

I was nervous about learning something new. Now that I’ve gone through that, there is the whole idea of having accomplished something new. Of pushing myself to put my thoughts out there and liking what I saw and liking the responses I was getting back. (Chris, e-journal)

*Interaction.* Interaction occurred in several dimensions in this study. Not only did participants engage with the content and with technology but they also interacted with fellow learners, the instructor, and the researcher. Students indicated the Bulletin Board provided a valuable forum for engagement with peers to share professional experiences and discuss curriculum issues that were relevant to them in their own situations. Ann commented,

Well, I must admit that reading and answering the curriculum questions is probably the highlight of this course for me. Getting to ponder what I think about curriculum and what others think and write about is really engaging. It gets curriculum issues out of some dusty textbook or document and out into the open where we can talk about those things that really concern and interest us. (Ann, on-line evaluation)

Susan expressed appreciation for the ways in which fellow participants committed to responding to postings, and valued the richness that the diversity and commonalities of experience added to the discussion.

I was very satisfied by the discussion that resulted from the question I posted on the "Integrating Aboriginal Perspectives into Curriculum" document. It certainly

makes you feel good when all of the people from the study group respond in a thoughtful and interactive way. We all have such a wealth of experience and our differences and similarities in perspective and situations add to the richness of discussion. (Susan, email)

Participants indicated their appreciation for the opportunity provided by response e-journaling for self reflection on their learning, as well as the dyadic connections the sharing process forged with the instructor and researcher. Chris observed:

The personal aspect is somehow very important, encouraging on a personal level, not just at the class level. Even though we are recognized for our contributions at the group level, the personal aspect seems hugely important here as well. (Chris, e-journal)

The personal touch is important in any learning situation, but perhaps more so on-line where no welcoming smile or nod acknowledges presence on entering the site. Students in this study wanted their professor to be there, to make his presence felt, to acknowledge their presence, to listen to their voices, and to respond. Although on-line instructors may be vicariously aware of learners' feelings of isolation, without personal experience of learning on-line, the vagaries of learning in this medium and the extent to which learners required initial reassurance and supportive presence may not be fully contemplated.

*Technology.* Because none of the participants had previous experience with learning on-line, initial anxiety levels were high. During the first week, Ann e-mailed:

[A]ll this e-mail stuff is scaring me to death. And, the last thing you want on your hands is a dead Kindergarten teacher who thinks she is a grad. student... This is the first course on line and I have to say that I am panicking all ready... The idea of conversing or "chatting" on-line is setting me into a cold sweat. (Ann, e-mail)

However, having overcome the steep learning curve, participants appreciated the process by which simple initial assignments allowed them the time to become familiar with and gain confidence in navigating

WebCT, and thus prepared the way for future intellectual challenges unencumbered by technology related anxiety. Two weeks later, Ann reflected:

You know, part of embracing a new curriculum is the learning of new things, new strategies, new concepts that you understand and are willing to try in your classroom. Anytime we learn new things, it gives us such pleasure and empowers us to try on to more new things.... It is a great feeling. (Ann, e-journal)

Skill development through interaction with technology promoted feelings of pride in students' accomplishments, self efficacy, and confidence, as well as deeper insights into the applicability of technology in their own professional situations, and the visioning of new possibilities for professional development and collaboration on-line at a provincial level.

*Opportunity to participate.* Owing to vast geographic distances from urban centres in Canada, continuing education for rural and northern educators is difficult. Although a few programs are offered, usually they place high demands on family time. Although the idea of learning on-line was daunting to most, the six who completed the course overcame their initial trepidation and saw increased opportunity in this way of learning. Midway through the course, in an e-journal entry, Ann shared,

Remember how panic-y I was at the beginning of this course? I felt I was really out of my league. I can now tell you that I quite enjoy taking a course by this method. It opens up so many more opportunities for taking university courses while you are teaching. To be f2f would be nice, but it is not always necessary. (Ann, final interview)

*Flexibility.* Participants were all working full-time in challenging jobs and had family commitments as well. The flexibility of on-line learning fitted with the demands of busy personal and professional lives. Clare noted,

Having a fairly demanding full time job, family commitments, and everything else that goes into my full life, I really felt I was comfortably able to carve out enough time to make my learning experience positive in the course. I would say

that this is a huge up side for on-line learning and I would most certainly do this type of course again. (Clare, final interview)

Flexibility was a vital factor in making the learning experience workable for participants, as well as a selling point for future on-line learning.

*Personal safety.* Most graduate classes are delivered in the evenings. Attacks in the vicinity of universities, particularly at night and on women, have increased in the past years. Chris highlighted her disquiet regarding personal safety going to and from class on campus: "At the back of my mind I am conscious of campus muggings that have happened. So the security and safety and comfort of being able to do it at home is nice" (Chris, e-journal). Safety in and around universities is an issue that is of concern on most campuses in North America (College and Future.com, 2004). Indeed, at the time of writing, following reports of assaults, the University of Saskatchewan has commissioned a review of personal safety and security on campus. On-line education can provide a safe option for people who have no alternative to walking alone on campus at night to attend class, and fear for their personal safety.

*Opportunity to network.* The group, although small, brought people together from a large area of Canada. Participants valued the opportunity to share and reflect with a wide range of like-minded people that learning on-line facilitated.

I like the fact that our group is comprised of people who are working in a variety of situations and have had a broad range of personal experience. Our collective voice is stronger because we all have different experiences and work in various places...This diversity enriches the learning experience. (Susan, on-line evaluation)

Although participants worked in different situations and had many different life experiences, they had so much in common professionally, producing a creative mix that stimulated active discussion on a wide range of issues.

On consideration of the factors that made the on-line learning experience meaningful for student participants, it seems most of these components were connected and interdependent. Feelings of

accomplishment derived from self knowledge, self expression, and interaction with content, process, and participants. Moreover, the gaining of technical skills not only lubricated the process of on-line learning, but also led to heightened feelings of achievement among participants. Participants indicated that while external factors, such as convenience, comfort, and flexibility were important for the feasibility of the learning experience, their enthusiasm derived to a greater extent from the value of the process. Students' writings and reflections throughout the course as well as their final interview responses focussed on the positive to a far greater extent than on the negative factors impacting on their learning experience. Clare commented, "I think the benefits far out-weighed the drawbacks – at least they did for me" (Clare, final interview).

#### *Detracting Factors*

One of the main detracting factors of on-line learning became apparent in the initial week of the course, when two of the eight students withdrew because of difficulty in accessing the course website. The main drawbacks for student participants who completed the course included group assignments, reduced instructor input, lack of face-to-face contact including the opportunity for conversation, the absence of body language, and immediate clarification of questions that is available in a traditional situation.

*Access difficulties.* Although students who accessed the course without undue problems highlighted the convenience of this mode of interactive learning, two learners in remote locations withdrew from the course during the start-up week. Brian withdrew because of Internet access problems from his remote northern location. He wrote:

We cannot hook up to the internet because we don't have enough circuits in our phone lines (boxes) for it to work...in other words it is useless. But we have high hopes and we will get there once we've learned more about alternative ways to hook up. For now we do what we can. (Brian, e-mail)

The other student, Gavin, also living in the north, cited lack of computer skills and support to allow him to gain competence as his reasons for withdrawal. He had no computer access at home, and no support within

the school in which he taught. Further, he had not previously accessed the Internet or used email. Although I talked to him several times by telephone and endeavoured to help him get connected, he felt unable to participate.

I am not computer literate and I am having an extremely difficult time accessing the required material. I appreciate being allowed into the course but I do not think that I can complete it. It is just too frustrating trying to get into the website and failing time after time. (Gavin, email)

Ironically, these two participants were located in the most remote locations and were representative of the population this type of course targets, reinforcing Schwier's (2001) finding that the seeming potential of on-line learning for inclusion can be viewed as exclusive, in that only those with access to technology and the skills to use it can benefit. The disparity between those who have access to computer-technology telecommunications and those who have not is termed the digital divide. Educators tend to view the digital divide as existing between developed and under-developed nations; however, it exists far nearer to home in remote, rural locations as well as in poverty-stricken inner city areas of North America (Birdsall, 2000).

*Group assignments.* Although Clare highlighted the impetus group working provided, "someone else was depending on me to submit an assignment [and] I was not going to let her down" (e-journal), most of the frustrations described by participants arose from group assignments. Apparent in this study from start to completion was the consideration and respect participants demonstrated toward each other. However, this depth of respect and to a certain extent the lack of relational communication was manifested in participants' inhibitions toward crossing boundaries to comment and critique others' work. Fran commented, "The assignment seemed individual. It felt disrespectful of me to critique – seemed too personal" (final interview).

Some participants noted the extra time spent arranging on-line meetings and observed the volume of e-mails back and forth was cumbersome; competing demands in their lives and awareness of other people's busy schedules made on-line collaboration challenging. Susan noted,

This week has been a bit more stressful in terms of the assignment. Working together with a partner on-line really does have its challenges. I welcome the chance to work together, but it proved to be fairly difficult. Rick and I did start out well by making contact and plans to e-mail each other as soon as we had done all of the required readings. Then our lives got in the way! I was away for the Thanksgiving weekend and Rick had a sick daughter at the beginning of the week, so it was Wednesday before we really got the communication going. I realize all of these issues made our process of connection frustrating for both of us. (Susan, e-journal)

Other frustrations arose from the lack of complete understanding of the requirements for one group assignment. Instructions on-line must be very clear, and on realising ambiguity, prompt instructor input is necessary for clarification.

*Lack of face-to-face contact.* Participants, in noting the flexibility of learning at a distance, also observed that it is more difficult to ask direct questions, and commented they missed the lack of immediate clarification when questions arose regarding assignments. Chris noted the absence of body language as another drawback. "Not being able to see people's reactions. That's a big part of what I do. I am looking for body language. I miss that" (Chris, on-line evaluation).

*Instructor input.* Several studies in on-line learning have indicated that the role of the instructor is crucial to the success of an on-line course (Anderson & Garrison, 1998; Bonk, Kirkley, Hara, & Dennen, 2001; Bullen, 1998; Palloff & Pratt, 1999). In this study the course instructor, John, was a pioneer in teaching and learning on-line, having taught several distance education courses since the mid 1990s using e-mail and web pages. Although he had not used WebCT as a delivery platform previously, neither of us foresaw any problems. Initially, John seemed quite confident and optimistic regarding the fit of WebCT with his teaching philosophy. However, as the course progressed, his frustration with WebCT increased. He found navigating the WebCT site cumbersome. He commented, "It takes me forever to get in there, and the whole process is discouraging of regular visiting" (John, e-mail). Additionally, university e-mail server problems compounded the communication problems. Although experienced in working on-line and dedicated to a student-centred pedagogy, the workload, competing



demands on his time and troublesome navigation resulted in John becoming completely alienated from WebCT and his resolve not to teach on-line again.

It reconfirmed my recent decision not to teach on-line. I will use the internet here and there and e-mail to support face-to-face classes. I don't think the universities have the resources to support it [on-line education] with the way it needs to be supported -- not this university and not many other universities. An on-line course should count for two in course teaching requirements with the frustration it produces.... I will never use WebCT again. I won't go near it with a ten foot pole. I've thought about this and this is the reality. (John, final interview)

John's frustration with the platform resulted in his reduced presence on-line, and increased researcher interaction with learners and the instructor in a supporting role. Learners wanted to see instructor presence. His was "an important voice". Because he graded the assignments, participants wanted his direct response to their queries. Participants missed the immediate clarification and direct contact that occurs as a matter of course in a face-to-face class. Because we were all interacting in a text-based medium, there was no opportunity to meet, discuss, and resolve issues that arose. On-line, it may be easier to let issues slip under the surface than to dig them up and rake them over. This may be a main drawback of asynchronous communication. Although an issue may be buried, if it is unresolved it remains an issue.

## CONCLUSION

The readiness of learners in this study in terms of technology and autonomous learning was initially low; however, far from being a deterrent to student participants, the challenge provided, and the feelings of accomplishment generated by gaining new skills, resulted in increased self efficacy. Open acknowledgement of frustrations and anxieties coupled with support, encouragement, and dialogue provided opportunities to come to a new understanding of learning on-line. Learners in this study demonstrated that given high levels of commitment to their own learning, few obstacles could not be surmounted in an on-line learning environment.

Already successful in their professional lives, for adult learners in this study the idea of failing in their own learning was an anathema.

Personal values, goals, and attitudes were also part of personal power. Clare noted, "I am the type of person who when they have a mandate must finish what they start" (e-mail). The inner need to complete a task became a driving force. Additionally, feelings of reciprocity contributed an impetus to get the task done. Clare continued, "The fact that someone else was depending on me to submit an assignment [meant] I was not going to let her down. There is power working in groups" (e-journal). Participants demonstrated high levels of commitment to peers when tasks were mandated and were determined to fulfil their roles. While maintaining a heavy professional and personal load, which at times got in the way of their own learning, participants' inner demands of self provided a balancing force. For student participants, the determination to be successful in their own learning outweighed their heavy loads.

Although external motivators such as improved employment opportunities and higher salaries and pensions were important initial stimuli for embarking on the course, dialogues with participants throughout the study indicated their value of and engagement with the type of learning that acknowledged, respected, and built on their past experiences and was relevant and applicable to their own real-life situations. The internal motivators, such as increased sense of self efficacy and the opportunity for self reflection and self exploration, contributed largely to learners' perceptions of what made the learning experience meaningful. Evident from this study was the greater the immersion of self in the learning process, the higher the intrinsic rewards derived from the experience.

Although the instructor had many years of university teaching experience, including familiarity with and practice of on-line education, he had no prior knowledge of the WebCT platform. The level of familiarity with the platform is a key part in whether the desired destination is reached by a few automatic mouse clicks or by hit and miss, backwards and forwards exploration, like a stroll along a familiar road or a traumatic journey through a maze.

As noted by Hara, Bonk, and Angeli, (2000), Hiltz (1998), and Wegerif (1998) the removal of time restraints in CMC, while providing ceaseless opportunities for instructors and students to learn and work, can also be overwhelming and cause overload. In this study, instructor

frustration arose from having inadequate time to get to know the WebCT platform, as well as finding its features cumbersome to use. On-line learning and teaching is not one-size fits all. Small universities have very limited resources to support on-line education. However, although larger universities have greater technology resources, their faculty also face heavy demands and expectations from on-line teaching; an Australian case study of the University of South Queensland's approach to offering post-graduate courses completely on-line raised questions as to whether the level of instructor interaction expected was sustainable (Department of Education and Science, 2003). In considering instructor readiness, not only must commitment and buy-in to on-line pedagogy be taken into account, but also the availability of professional development opportunities and technology support for instructors, as well as their existing workload. High quality on-line education is neither cheap nor easy, and necessitates investment in support and development, as well as acknowledgement of the time demands teaching on-line places on its instructors.

Time is a valuable and scarce commodity for professionals. Interactive on-line education can provide the flexibility for study when students are employed, or when they are situated in rural locations. However, of concern is that to date in Canada some of the more remote northern locations still do not have reliable and fast Internet service, and thus learners who might most benefit from this mode of course delivery are still excluded. In addition, also excluded are individuals who have Internet access, but lack computer skills and the in situ support to develop them.

Evident in this study were the ways in which working professionals prioritised the learning time they had available. For adult learners, this on-line experience was made meaningful not only by its convenience and flexibility but, more importantly, through the opportunity to engage with content, to increase technological skills, and to reflect and dialogue with peers on issues and concerns that were relevant to their professional lives. Rossett (2004) commented, "The tragedy is how rarely school-based educators talk about their own learning and development--and when they do, it's often with a cynical snort instead of a joyful chuckle" (para.12). Conversely, while acknowledging the negatives,

student participants in this study reflected at length and depth on their own learning, engaged in dialogue about issues and concerns, and related the insights gained to their professional situations. The opportunity to explore self and self learning was perhaps the high spot of this course for most adult learners. For the instructor of this course the experience was not positive, a finding that has implications for on-going staff development needs and technology support as more universities and departments offer Internet-based education.

#### NOTES

<sup>1</sup>The objectives of this course were not only task-oriented and activity-based to raise awareness of the curriculum issues in rural, northern and Aboriginal schools, but also capacity building to enhance self awareness, skills, and competencies of the participants. More focused objectives for students were to see and understand that curriculum is developed based on the stakeholders' values; to reflect on their own views of curriculum and how they might in the future adapt curriculum to match their students' needs; and to have the concrete opportunity to reflect on their own learning.

<sup>2</sup>WebCT is a course management tool that facilitates the creation of sophisticated World Wide Web based educational environments. While facilitating the organization of course material on the Web, WebCT also provides a variety of tools and features, including conferencing systems, bulletin board, on-line chat, student progress tracking, student self-evaluation, grade maintenance and distribution, access control, navigation tools, e-mail, course calendar and student homepages.

<sup>3</sup>All participants have been allocated pseudonyms.

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